Bass Lake Water Company Water Treatment Plant Project

Proposed Action

May 28, 2013

The Bass Lake Ranger District of the Sierra National Forest is seeking public input on the proposed Bass Lake Water Company (BLWC) Water Treatment Plant Project. This project was formerly analyzed by the Forest Service (FS) as the Bass Lake Water Company New Water Treatment Plant and Decommissioning of Existing Water Treatment Facilities Project under a Categorical Exclusion (CE). Upon conducting the CE analysis it was determined that an Environmental Assessment (EA) is the most appropriate anticipated level of analysis. The goal of this project is to authorize the BLWC to construct a new water treatment plant on National Forest System (NFS) lands through the issuance of a new Special Use Authorization (SUA) in the form of a Special Use Permit (SUP) and to approve the decommissioning of the existing water treatment plant and related facilities. The new water treatment plant would be located in Township 7 South, Range 22 East, Section 9, M.D.B.M. at the former site of the Falls Beach Resort parking lot adjacent to County Road 432 and Willow Creek in Madera County, California. The existing water treatment plant is located in Township 7 South, Range 22 East, Section 9, M.D.B.M. east of County Road 274 and adjacent to Willow Creek in Madera County, California (see attached project map).

EXISTING CONDITION

The existing SUP has been issued to the BLWC since early 1997 and expired at the end of 2006. The permit was amended to extend its expiration date one year at a time through 2009. The SUP has been expired since the end of 2009. The original SUP was issued in 1960 for the water treatment plant and has continually been under permit since. The existing permit allows the BLWC to use or occupy NFS lands to operate and maintain a public water system for the community of Bass Lake. The existing water treatment plant consists of: one diversion dam, 800 square feet; two redwood settling tanks (2,800 gallons each), 700 square feet; four metal storage tanks, 11,400 square feet; one chlorination plant, 400 square feet; 8,494 feet of waterlines (10 feet right-of-way), 84,940 square feet; and 2,265 feet of service roads (14 feet right-of-way), 31,710 square feet. The grand total square footage is approximately 129,950 square feet or three acres.

The proposed building site is the former site of the Falls Beach Resort parking lot. It is approximately 1.5 acres of leveled ground, has a rock retaining wall between the site and Road 432, and has a paved access road off County Road 432. Small to medium diameter trees, averaging approximately 14 inches, would be removed from the site.

The BLWC obtains their water through exercising its State appropriated water rights of 355-acre feet (115,669,224 gallons) per year from Willow Creek. Current facilities do not provide sufficient water capacity for current and future water consumers in the community of Bass Lake while meeting all water treatment regulatory requirements. The existing intake structure and raw water pipelines are more than sixty years old and have several leaks. These facilities are inefficient and lack appropriate water security...
systems to safeguard against major ruptures and system malfunction. Sudden loss of water from a pipe rupture would leave customers without reliable drinking water and fire protection once distribution storage reservoirs are drained. The existing water treatment plant does not comply with current water supply permits and the California Department of Public Health (CDPH) codes.

**DESIRED CONDITION**

The desired condition is for the BLWC to operate a modern microfiltration water treatment plant in order to comply with current water supply permits and CDPH codes and provide sufficient and reliable treated water for current BLWC customers and to meet future water demands. The new water treatment plant would be capable of treating water from Willow Creek to allow full use of existing water rights and would also provide additional capacity should BLWC acquire additional surface water rights. The new water treatment plant would be efficient and provide appropriate water security systems to safeguard against major ruptures, fire incidents, and system malfunction. The existing water treatment plant would be decommissioned and the ground would be returned to its natural state.

**NEED FOR CHANGE**

There is a need to issue a 30 year SUP for the construction of a new water treatment plant to provide sufficient and reliable treated water for BLWC customers, including approximately 500 permanent and 1,700 seasonal residents, decommission the existing water treatment plant and restore the land to its natural state. The existing water treatment plant and its related facilities are more than sixty years old, outdated, and subject to failure. Current facilities do not provide enough water capacity for current and future water consumers while meeting all water treatment regulatory requirements.

The Sierra National Forest’s Land and Resource Management Plan (LRMP) describes management direction that guides the administration and use of the Sierra National Forest. Management and Guideline Standard, Lands 4.5.2.13, states that Forest land will be managed for a range of multiple uses objectives and outputs including water yields. Temporary uses are authorized through SUPs. Through this guideline, the Forest Service (FS) is directed to allow multiple types of uses to occur on FS land and is the water quality management agency for the public domain lands it administers. By authorizing the construction of the new water treatment plant and the decommissioning of the existing water treatment plant, the FS would fulfill its responsibilities to provide clean drinking water to the American public. There is need to authorize a new water treatment plant and its operations through a 30 year term special use permit, decommission the existing outdated plant and restore the land to its natural state.

**PROPOSED ACTION**

Based on the purpose and need, the Bass Lake Ranger District of the Sierra National Forest proposes the following actions:
• Issue a Special Use Permit for a period of 30 years. A new SUP would have current terms and conditions and require an Operations and Management Plan that must be followed in order for BLWC to remain in compliance.

• Construct a new continuous microfiltration (CMF) process water treatment plant that would require a maximum of approximately 1.5 acres of ground disturbance. The new water treatment plant would consist of a 4,000 square-foot metal treatment building, one 5,000 gallon raw water tank, one 21,000 gallon finished water tank, one 200 square foot finished water pump station building, one 200 square foot raw water pump station building, approximately 1,000 feet of pipelines (500 feet of water lines and 500 feet of waste water lines), generator, propane tank and a ten stall parking lot estimated to be 6,500 square feet.

• Decommission the existing water treatment plant and its related facilities. This entails deconstructing and removing from NFS lands the existing water treatment plant and above ground related facilities with the exception of an existing water storage tank that would contain back-fed treated water from the new water treatment plant. Road access to the water storage tank along 7574S would remain authorized under the new SUP. Ground disturbance resulting from the removal of the existing improvements would be returned to its natural contours and leveled with the ground. Resource protection measures and best management practices (BMPs) such as water bars and slash cover would be implemented over any disturbed ground. An eroded ephemeral stream channel adjacent to the existing treatment plant would be stabilized and re-vegetated with native plants or allowed to heal naturally. All rehabilitation techniques would follow appropriate resource protection measures. The decommissioning would take approximately two years to complete. Work would be conducted through the use of ground based rubber tire or tracked equipment (i.e. excavator, backhoe, trencher) and hand tools.

The following actions are part of developing the treatment plant facility:

• Install approximately 200 feet of 10 inch diameter screen water intake pipe to transport raw water from the Willow Creek to the treatment plant.
• Install approximately 200 feet of 8 inch diameter treated water outflow pipe to transport treated water from the treatment plant to the municipal water system.
• Install approximately 500’ of 6 inch diameter wastewater sewer pipeline that would connect the treatment plant to the municipal wastewater system.
• Construct approximately 750 feet of fencing comprised of a combination of wire, wood and concrete blocks that would be approximately 6 feet tall around the permitted area.
• Reconstruct approximately 500 feet of an existing native surface access road off County Road 432 for some deliveries and emergency access.
• Install a power pole and transformer.
• Install a metal gate on the existing short access road off Road 432 near Willow Creek Bridge to restrict public access while keeping the road accessible as the main ingress/egress point.
• Removal of small to medium diameter trees, averaging approximately 14 inches, and shrubs on project site.

The BLWC would tie all their new facility’s utilities into existing phone, power, sewer, and water utility lines that are located immediately adjacent to the proposed treatment site. The FS would approve all final site designs and construction plans.

Design Criteria

• No discharge of treated water would be released into Willow Creek or Bass Lake.
• Trees along County Road 432 would be retained for visual purposes.
• All Forest resources including archaeological, hydrological, biological, botanical, visual, and soil resources would be analyzed to determine appropriate resource protection measures.
• Best management practices would be developed and incorporated into the proposed action.
• All heavy equipment would be washed prior to entering NFS lands to prevent the introduction of noxious weeds.
• Any mulch or wattles used for erosion control would be approved by the FS to ensure it is weed-free.